REMARKS

Applicants wish to thank the Examiner for considering the present application. In the Office Action dated April 5, 2005, claims 1-24 are pending in the application. Applicants respectfully request the Examiner to reconsider the rejection.

Claims 1, 8-14, and 20 stand rejected under 35 U.S.C. §103(a) as being unpatentable over *Ibanez-Meier* (6,151,308) in view of *Dalal* (6,819,943). Applicants respectfully traverse.

Claim 1 is directed to a communication system (10) that is generally illustrated in figure 1 and is described on pages 5-7. The communication system (10) includes a stratospheric platform (18) having a payload controller and a phased array antenna having a plurality of elements for generating a first beam and a second beam. A gateway station (20) in communication with said stratospheric platform (18) receives a first signal having a first beam having interference from the second beam therein and a second signal having a second beam having interference from the first beam therein. As is best shown in Figure 3 and the corresponding text on pages 9-10, the gateway station (20) includes a first subtracting block (74) for subtracting the second signal from the first signal to obtain the first beam and a second subtracting block (76) for subtracting the first signal from the second signal to obtain a second beam. One point to note is that only two signals are received to form two beams.

The *Ibanez-Meier* reference teaches stratospheric platforms and satellites at various altitude levels. A user may receive signals from two different sources. The system relies on spatial diversity to prevent interference. As the *Ibanez-Meier*

reference implies, when two signal sources become colinear or near colinear, interference between the signals may result in unacceptable signal degradation. As stated beginning in Col. 16, line 61, signal degradation may be remedied by ceasing to communicate over one of the links in which degradation is present or switching to another link. This highlights the spatial diversity aspect for resolving interference. No teaching or suggestion is provided for subtracting signals as in the present invention.

The *Dalal* reference is cited for teaching a first subtracting block and a second subtracting block. The Examiner points to Col. 14, lines 20-25, and Fig. 8 box 856a. The *Dalal* reference is specifically directed to a transmitter and not a receiver in a gateway station. Applicants therefore respectfully request the Examiner to reconsider this rejection as well since the *Dalal* reference does not teach a gateway station that is in communication with a stratospheric platform. The *Dalal* reference also does not teach that the gateway station receives a first signal having a first beam having interference from the second beam therein and receiving a second signal having the second beam having interference from the first beam therein wherein the gateway station has a first subtracting block and a second subtracting block for subtracting the second signal from the first signal and the first signal from the second signal, respectively. Applicants therefore respectfully request the Examiner to reconsider the rejection of claim 1.

Claims 8-13 depend from claim 1 and are believed to be allowable for the same reasons set forth above.

Claim 14 is a method claim that recites receiving a first signal having a first beam having interference from a second beam therein at a gateway station receiving a second signal having a second beam having interference from the first beam, subtracting the second signal from the first signal to obtain the first beam, and subtracting the first signal from the second signal to obtain the second beam. It is clear that this also refers to receiving signals and not transmitting signals. Therefore, the *Ibanez-Meier* and *Dalal* references also do not teach or suggest the elements set forth in claim 14.

Claim 20 is also an independent claim and describes receiving a plurality of signals. Thus, claim 20 is directed to a receiving configuration in a similar manner to that of claims 1 and 14. Therefore, claim 20 is also believed to be allowable for the same reasons set forth above.

Claims 5-7 stand rejected unde4r 35 U.S.C. §103(a) as being unpatentable over *Ibanez-Meier* in view of *Dalal* in further view of *Rouffet* (5,410,731).

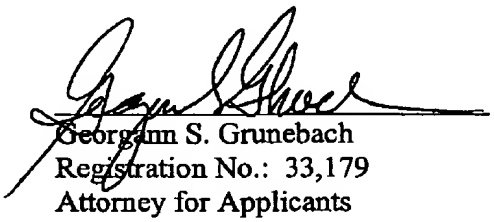
Claims 5-7 are dependent upon claim 1. The *Rouffet* reference also does not teach or suggest the elements missing from claim 1. That is, the *Rouffet* reference also does not teach or suggest subtracting using the receiving signals. Applicants therefore respectfully request the Examiner to reconsider the rejection of claims 5-7.

Claims 2-4, 15-17, and 21-24 stand rejected as being unpatentable over *Ibanez-Meier* in view of *Dalal* in further view of *Baier* (6,519,477). Applicants respectfully traverse. Claims 2-4 are dependent upon claim 1. Claims 15-17 are dependent upon claim 14 and claims 21-24 depend from claim 20. The *Baier* reference also does not

teach or suggest the subtracting blocks of a received signal. Applicants therefore respectfully request the Examiner to reconsider the rejection of these claims as well.

In light of the above remarks, Applicants submit that all rejections are now overcome. The application is now in condition for allowance and expeditious notice thereof is earnestly solicited. Should the Examiner have any questions or comments which would place the application in better condition for allowance, he is respectfully requested to call the undersigned attorney.

Respectfully submitted,



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